
CHAIRMAN'S COMMENTS*

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ALTHOUGH we are concerned primarily with sulfates and particulates, general principles may be involved which might have application in other areas, certainly in connection with other chemicals in the environment, and, perhaps, even more generally than that.

Considering costs and benefits, I notice the program says costs *versus* benefits. I do not know why these conflict with each other; perhaps they should harmonize rather than conflict. We have to consider: when costs are involved, who pays, and when benefits are involved, who benefits? Sometimes the same people will pay and benefit. Sometimes people will pay and not benefit. Sometimes people will benefit and not pay. In some respects, everybody pays when something happens that increases production costs. When we talk about controlling the amounts of things that get into the environment we must accept the fact that costs will be added to production costs. Some people will benefit from this because it is to their advantage to have production costs go up, and some people will not benefit because it is to their disadvantage to have production costs go up.

Some of the cost, obviously, will come from taxes as well as from our pockets for the consumer goods that we all have to use and pay for. And we know that there is a large and growing establishment to see that controls are developed and implemented. Most of the costs for these activities come from our taxes.

Some of us benefit in different ways and in different degrees. We can think of such benefits as how much less we pay for laundry and for cleaning if we do not have a lot of soot in the air. How much is it worth to an asthmatic not to have an asthmatic attack? I do not know how to put a dollar figure on that, but it is obviously worth something, and it is worth something to somebody to have asthmatics having attacks, because they

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can sell remedies, air-conditioning filters, or something else. Whenever there is an expense to a consumer of services, including medical services, there is a benefit to the provider. We can think about direct costs or indirect costs, or both. Dr. Merrill Eisenbud mentioned some direct costs yesterday. Many may not be so happy about having to spend billions of dollars from which we may get no benefit. Immediate direct costs, the most obvious ones, include additional fuel costs and costs of various installations and equipment that industry has to put in to achieve certain required limits. People who sell fuel might not be unhappy about this. The engineering firms that design and install control equipment might not be unhappy about this either. So this is a benefit to someone.

There are other kinds of benefits. We have some new industries growing up, such as the industry of preparing newsletters summarizing legislation. This is a big growth industry. A lot of people have developed extensive research programs related to environmental requirements. This helps the universities; it helps research people; it helps the journals to have articles to publish. Another growing industry is that of holding seminars and explaining to people what is going on in the whole environmental field. Technical and health consultants are in demand. I have become aware of great benefits to the legal profession since environmental law offers many opportunities and benefits, taking up some of the slack which has resulted from no-fault automobile insurance.

So all of this, I guess, adds up to the fact that there are a lot of benefits from environmental regulations, and so when we talk about costs we should think about these benefits too.